



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO. |
|---|-------------|----------------------|----------------------------|------------------|
| 10/720,222  | 11/25/2003  | Junji Hayashi        | Q78668                     | 4883             |
| 7590 05/03/2004<br>SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC<br>2100 Pennsylvania Avenue, N.W.<br>Washington, DC 20037-3213 |             |                      | EXAMINER<br>GORDON, RAEANN |                  |
|   |             |                      | ART UNIT<br>3711           | PAPER NUMBER     |

DATE MAILED: 05/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/720,222

Applicant(s)

HAYASHI ET AL.

Examiner

Raeann Gorden

Art Unit

3711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,7 is/are rejected.
- 7) ☒ Claim(s) 3,4 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11-25-03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voorheis et al (2003/0229183) in view of Gendreau et al (4,955,613) and Nakamura (6,348,016). Regarding claim 1, Voorheis discloses a two-piece golf ball comprising a core made from a) 49% polybutadiene synthesized with a lanthanide series element (rare earth metals) having a cis-1,4 bond content of at least 80%, b) 0.05 to 18 phr organic peroxide, c) unsaturated carboxylic acid, d) sulfur based curing agents, and e) fillers. The core has a diameter from 1.4 to 1.6 inches (35.56-40.64 mm)(para.11). Voorheis discloses the core includes up to 49% of the lanthanide polybutadiene but does not disclose values from 60 to 100 as claimed by Applicant. However, Gendreau teaches a core comprising from 15 to 85 parts of a lanthanide polybutadiene. The cover is made from thermoplastic polyurethane or ionomers and has a thickness from 0.01 to 0.20 inches (0.254-5 mm) (para. 11, 43-44). The cover has a Shore D hardness of less than 60 (para. 46). Voorheis does not disclose an inorganic filler in the cover. However, Nakamura teaches a two-piece golf ball with a cover comprising an ionomer and from 11 to 45 parts of an inorganic filler (abstract).

Art Unit: 3711

Voorheis in view of Gendreau and Nakamura in combination teaches the deformation of the core and golf ball since the materials are the same. Regarding claim 2, Voorheis discloses the lanthanide metal is neodymium. Regarding claim 5, Nakamura discloses the inorganic filler is barium sulfate. Regarding claim 7, the weight of the golf ball is an obvious feature since nearly all golf balls have a required weight of no more than 1.62 ounces or 45.92 g. One skilled in the art would have modified Voorheis in view of Gendreau and Nakamura to achieve the golf ball properties.

#### ***Allowable Subject Matter***

Claims 3, 4, and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raeann Gorden whose telephone number is 703-308-8354. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 703-308-1513. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Raeann Gorden', is positioned above the printed name and title.

Raeann Gorden  
Examiner  
Art Unit 3711

Rg  
April 29, 2004